



G A O

Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, DC 20548

April 16, 2009

Congressional Committees

Subject: *Military Personnel: Status of Accession, Retention, and End Strength for Military Medical Officers and Preliminary Observations Regarding Accession and Retention Challenges*

This letter formally transmits the briefing (enc. I) we prepared in response to Senate Report 110-335 accompanying the National Defense Authorization Act for Fiscal Year 2009. The Senate Report required the Comptroller General to conduct an assessment of medical and dental personnel requirements of the Departments of the Army, Navy, and Air Force, including their reserve components. To satisfy this requirement, we previously provided you on April 1, 2009 a copy of the draft briefing we sent to DOD for comment. DOD's comments are reprinted in enclosure II.

We are also sending this letter and attached briefing to the Secretary of Defense and the Secretaries of the Army, Navy, and Air Force. This letter and briefing will also be available on our Web site at <http://www.gao.gov>. Should you or your staff have any questions concerning this product, please contact me at (202) 512-3604 or farrellb@gao.gov. Contact points for our Office of Congressional Relations and Public Affairs may be found on the last page of the briefing.

Brenda S. Farrell

Brenda S. Farrell
Director
Defense Capabilities and Management

Enclosures

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 16 APR 2009		2. REPORT TYPE		3. DATES COVERED 00-00-2009 to 00-00-2009	
4. TITLE AND SUBTITLE Military Personnel: Status of Accession, Retention, and End Strength for Military Medical Officers and Preliminary Observations Regarding Accession and Retention Challenges				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Government Accountability Office, 441 G Street NW, Washington, DC, 20548				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 62	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

List of Committees

The Honorable Carl Levin
Chairman
The Honorable John McCain
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Daniel K. Inouye
Chairman
The Honorable Thad Cochran
Ranking Member
Subcommittee on Defense
Committee on Appropriations
United States Senate

The Honorable Ike Skelton
Chairman
The Honorable John M. McHugh
Ranking Member
Committee on Armed Services
House of Representatives

The Honorable John P. Murtha
Chairman
The Honorable C.W. Bill Young
Subcommittee on Defense
Committee on Appropriations
House of Representatives

Briefing for Congressional Committees



**Military Personnel: Status of Accession,
Retention, and End Strength for Military
Medical Officers, and Preliminary
Observations Regarding Accession and
Retention Challenges**

**Briefing for Congressional Committees
April 16, 2009**

Overview

- Introduction
- Background
- Objectives
- Scope and Methodology
- Preliminary Observations
- Agency Comments and Our Evaluation
- Appendixes

Introduction

- Military medical professionals are in demand, and the Department of Defense (DOD) is experiencing shortfalls in physician, dental, nurse, and other medical officers.
- The Senate Armed Services Committee (SASC) report accompanying the National Defense Authorization Act for Fiscal Year 2009 directed the Comptroller General to report by April 1, 2009, to the congressional defense committees on a study of medical and dental personnel requirements for the Army, Navy, and Air Force, including their reserve components, to meet their medical missions.
- Specifically, the SASC directed the Comptroller General to evaluate medical workforce planning efforts throughout DOD to determine those medical specialties that have experienced the largest gaps between identified needs and fill rates; challenges that hinder the achievement of medical personnel goals; and the plans to resolve medical personnel shortfalls.
- In addition, in a subsequent meeting with SASC staff, they clarified the committee's needs and emphasized that we should also examine data from each of the services to determine whether they met their recruiting and retention goals and to identify service organizations that have responsibility for recruitment and retention. We agreed to provide our preliminary observations by April 1, 2009, and our final report during fall 2009.

Background

- Accession refers to the military services' bringing medical officers¹ into the military to carry out mission-essential tasks. Active and reserve components set accession goals and strive to meet them through financial incentives, programs, and advertising. Recruiting refers to the services' acquiring medical students who will later be accessed upon completion of their medical education.
 - The services' active components recruit medical students into the Armed Forces Health Professions Scholarship Program (HPSP). The HPSP creates a pipeline of medical officers, and over half of physician and dental accessions come from this program.
 - The HPSP provides tuition payments, stipends, and reimbursement for other expenses to qualified medical students in return for an active duty obligation.
 - While the majority of graduates of the HPSP are commissioned into active duty service to complete their graduate medical education (residency), some portion will complete their graduate medical education in civilian training programs and enter active duty upon completion.
 - The active and reserve components also offer direct accessions to fully trained medical professionals interested in military service.
- Retention refers to the military services retaining servicemembers with the necessary skills and experience.

¹For the purposes of this report, we analyzed data and provided information for medical officers only.

Background (continued)

- Congress annually authorizes the number of personnel that each service may have at the end of a given fiscal year.
 - This number is known as authorized end strength.
 - End strength represents the actual number of personnel on board at the end of a fiscal year.
- Based on the statutory authorizations, DOD and the services establish annual year-end authorized personnel levels for various medical occupations. The services group their occupations for health professional officers² into the following categories: Medical Corps, Dental Corps, Nurse Corps, Medical Service Corps, Medical Specialist Corps, Biomedical Science Corps, Veterinary Corps, and Warrant Officers. For the purposes of our report, we used the term “physicians” for the Medical Corps, “dentists” for the Dental Corps, and “nurses” for the Nurse Corps. We used the term “other medical officers” for the Medical Service Corps, Medical Specialist Corps, Biomedical Science Corps, Veterinary Corps, and Warrant Officers.
- To meet and maintain authorized personnel levels, the services must balance accessions and retention.

²For purposes of this report, we use the term “medical officers” in place of “health professional officers.”

Objectives

Our objectives were to answer the following questions:

1. How is DOD organized to recruit medical students and access medical officers across the military services?
2. To what extent did the active and reserve components meet their annual accession goals for medical officers in fiscal years 2001 through 2008?
3. To what extent did the active and reserve components retain medical officers in fiscal years 2001 through 2008?
4. To what extent did the active and reserve components meet their annual authorizations for medical officers in fiscal years 2001 through 2008?
5. What challenges, if any, have the military services faced in their accession and retention of medical officers, and what plans have they developed to address those challenges?



Scope and Methodology

- We reviewed data and information from the three active components – the Army, the Navy (which provides medical care for Marine Corps servicemembers and their beneficiaries), and the Air Force – and the five reserve components – the Army Reserve, the Army National Guard, the Navy Reserve, the Air Force Reserve, and the Air National Guard. These components are responsible for providing military officers to meet DOD's medical mission.
- We reviewed DOD and service policies and instructions related to the accession and retention of military medical officers, and interviewed military and civilian officials at the Office of the Secretary of Defense Health Affairs, Offices of the Surgeons General, and service recruiting officials. We examined data from the Defense Manpower Data Center and the services to determine the extent to which the active and reserve components met their annual accession goals, retention goals, and authorizations for fiscal years 2001 through 2008, when available. We also reviewed relevant documents and reports from DOD, the services, and GAO, and interviewed cognizant officials from DOD and the services to determine the challenges the military services faced in accessing and retaining medical officers and the plans they developed to address those challenges. Appendix I provides a more detailed discussion of our scope and methodology.
- We conducted this performance audit from July 2008 through March 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.



Preliminary Observations

Objective 1: DOD's Organization

- There is no joint DOD unit or process dedicated to recruiting medical students and accessing medical officers, because recruiting and retention are the responsibility of the services.
- Each military service has its own organizational structure, responsibilities, and varying degrees of personnel resources.
- The Army has one medical recruiting brigade for the active Army and the Army Reserve. The brigade is comprised of five medical recruiting battalions geographically dispersed throughout the country. The five battalions are comprised of 16 medical recruiting companies.
- The Army National Guard accesses medical officers on a state-by-state basis, which differs from the active Army and Army Reserve. While each state has personnel qualified to access medical officers, only two states have recruiters who focus solely on accessing these officers.



Preliminary Observations

Objective 1: DOD's Organization (continued)

- The Navy has a recruiting command for its active and reserve components. The command covers the entire country with 26 Navy Recruiting Districts that are divided into and commanded by two different Navy Recruiting Regions, which employ over 5,300 active and reserve recruiters. However, only about 40 servicemembers recruit and access medical officers.
- The Air Force has separate recruiting services for both active duty and reserve components. The active Air Force has 24 recruiting units dedicated to recruiting and accessing active duty medical officers. The Air Force Reserve Recruiting Service does not have any units specifically dedicated to medical personnel. Further, the Air National Guard accesses medical officers on a state-by-state basis, but it dedicates personnel resources specifically to accessing these officers in one state.



Preliminary Observations

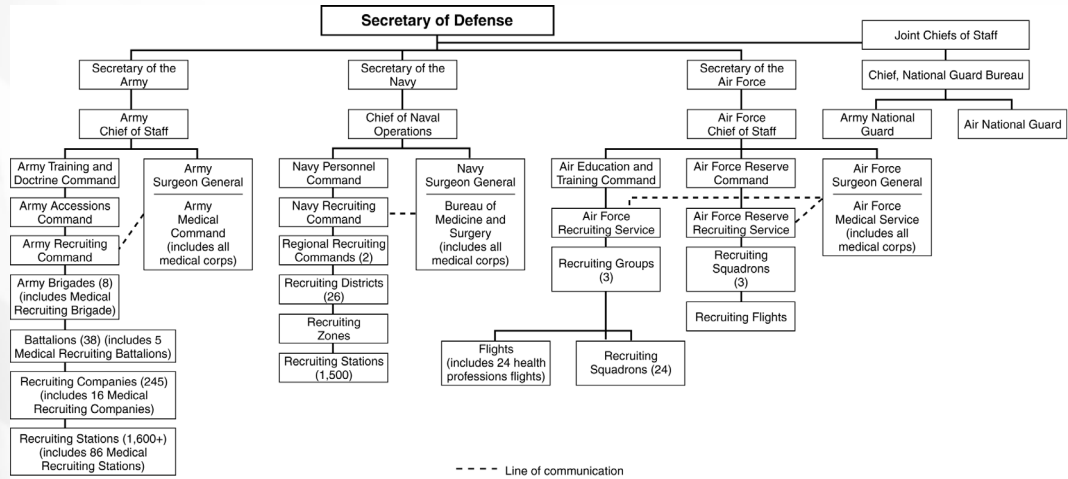
Objective 1: DOD's Organization (continued)

- Officials from each of the services stated that their recruiting organizations communicate with their respective Surgeon General Offices for various reasons, such as to obtain medical personnel goals and information regarding incentive and bonus programs.
- The service recruiting organizations periodically collaborate with each other through formal and informal meetings to discuss best recruiting practices and other related issues.
- The services' Manpower and Reserve Affairs offices provide oversight and develop policies for manpower issues, such as recruiting.
- Figure 1 shows DOD's organizational framework and the relationships among DOD and the service organizations.

Preliminary Observations

Objective 1: DOD's Organization (continued)

Figure 1: DOD's Organization to Recruit and Access Medical Officers^a



Source: GAO analysis of DOD information.

Note: For the purpose of clarity, several intermediate organizations are not included in this chart.

^aThe Army National Guard and the Air National Guard recruit medical personnel at the state level, separate from the active and reserve.



Preliminary Observations

Objective 2: Accessions

- The eight active and reserve components did not always meet their annual accession goals for medical officers in fiscal years 2001 through 2008.³
 - Over the 8-year time period, each component met or exceeded its annual accession goals for medical officers for several years.
 - Each active component met or exceeded its HPSP goal for the majority of years in the time period. However, no active and reserve component met its direct accession goals for the majority of years in the time period.
 - For the fiscal year 2001 through 2008 period, the components did not meet most of their HPSP and direct accession goals for physicians.
 - For the fiscal year 2001 through 2008 period, the components met most of their HPSP goals, but did not meet most of their direct accession goals for dentists.
 - For the fiscal year 2001 through 2008 period, the components did not meet most of their direct accession goals for nurses.⁴
 - For the fiscal year 2001 through 2008 period, the components met most of their HPSP and direct accession goals for other medical officers.
- Appendix II provides more detailed information on the medical accession goals by category of medical officer for each service component.

³Some service component data were unavailable to assess for the 8-year span. The Air Force was unable to provide data for fiscal years 2001 through 2003. The Army National Guard did not have accession goals for fiscal years 2001 through 2007. The Air Force Reserve and the Air National Guard did not have accession goals for fiscal years 2001 through 2008.

⁴The services do not use HPSP as a primary way to recruit nurses.



Preliminary Observations

Objective 3: Retention

- For fiscal years 2001 through 2008, the eight services' active and reserve⁵ components retained a majority of their respective physician, dental, nurse, and other medical officers annually.⁶ However, according to a senior official in the Office of the Assistant Secretary of Defense for Health Affairs, retention rates are not a major factor in the development of officer accession goals.
 - We found that the services' retention rates were between 77 percent and 95 percent.⁷
 - For active component physicians, annual retention rates were between 87 percent and 92 percent; for reserve component physicians, from 77 percent to 93 percent.
 - For active component dentists, annual retention rates were between 82 percent and 91 percent; for reserve component dentists, from 78 percent to 94 percent.
 - For active component nurses, annual retention rates were between 87 percent and 94 percent; for reserve component nurses, from 80 percent to 94 percent.
 - For active component other medical officers, annual retention rates were from 84 percent to 95 percent; for reserve component other medical officers, from 77 percent to 94 percent.
- Appendix III provides more detailed information on annual retention results by category of medical officers for each component.

⁵We analyzed retention data for the selected reserve since data were only available for those personnel.

⁶We calculated retention rates using data from the *Health Manpower Statistics* report from the Defense Manpower Data Center. To determine the percentage of medical officers retained by each category, first we subtracted the number of officers who left the services in a given fiscal year from the beginning strength for that fiscal year. Second, we divided the difference from our calculation by the beginning strength for that fiscal year. We did not calculate attrition rates in our review.

⁷According to service officials, the Navy Reserve, Air Force Reserve, and Air National Guard fiscal year 2004 retention data contained errors, and they agreed with our decision not to include them in our analyses.



Preliminary Observations

Objective 4: End Strength

- The military services' eight active and reserve⁸ components did not always meet their annual authorizations for physicians, dentists, nurses, and other medical officers in fiscal years 2001 through 2008.⁹
 - For example, while each service's active component nurses had end strengths below their authorized levels for every year during this time period, each service's reserve component nurses had end strengths above their authorized levels at least 1 year during this time period.
 - Appendix IV provides more detailed information on the medical officer authorizations for each component by medical officer category.
- Further, we found that, specifically for fiscal years 2005 through 2007, the eight active and reserve components were consistently below their annual medical specialty authorizations within each of the four medical officer categories, with one exception—Air National Guard dentists.¹⁰

⁸We analyzed authorization and end strength data for the selected reserve since data were only available for those personnel.

⁹GAO did not independently verify the validity of authorizations or end strength numbers. Authorizations are defined as the number of positions in which resources have been allocated to fulfill the services' medical mission. End strength numbers represent the actual numbers of medical officers on board at the end of a fiscal year. Fiscal year 2008 data were not available at the time of our review.

¹⁰According to officials, medical officers might have performed duties other than their primary occupational specialty during the fiscal year.



Preliminary Observations

Objective 4: End Strength (continued)

- **Physicians:**
 - The active Army was consistently below its authorizations in 6 physician specialties: Family Practice, Urology, Radiology, Psychiatry, Anesthesiology, and Neurological Surgery.
 - The active Navy was consistently below its authorizations in 7 physician specialties, including: Family Practice, Radiology, Allergy/Immunology, and Cardiac/Thoracic Surgery.
 - The active Air Force was consistently below its authorizations in 13 physician specialties, including: Allergy/Immunology, Pulmonary Disease, Gastroenterology, Cardiology/Cardiovascular, Infectious Disease, and Urology.
 - The Army Reserve was consistently below its authorizations in 8 physician specialties, including: Anesthesiology, Cardiac/Thoracic Surgery, Orthopedic Surgery, and Pulmonary Disease.
 - The Army National Guard was consistently below its authorizations in 2 physician specialties, including General Medicine.
 - The Navy Reserve was consistently below its authorizations in 13 physician specialties, including: Anesthesiology, Orthopedic Surgery, Cardiology/Cardiovascular, Gastroenterology, and Infectious Disease.
 - The Air Force Reserve was consistently below its authorizations in 5 physician specialties, including: Anesthesiology, General Surgery, and Orthopedic Surgery.
 - The Air National Guard was consistently below its authorizations in 4 physician specialties, including: Internal Medicine and Orthopedic Surgery.

15



Preliminary Observations

Objective 4: End Strength (continued)

- Dentists:
 - The active Army was consistently below its authorizations in 5 dental specialties, including: Orthodontics, Pedodontics, and Oral Pathology/Diagnosis.
 - The active Navy was consistently below its authorizations in Prosthodontics.
 - The active Air Force was consistently below its authorizations in 3 dental specialties, including: General Dentistry and Prosthodontics.
 - The Army Reserve was consistently below its authorizations in 4 dental specialties, including: Oral Maxillofacial Surgery, Prosthodontics, and Public Health Dentistry.
 - The Army National Guard was consistently below its authorizations in General Dentistry.
 - The Navy Reserve was consistently below its authorizations in 2 dental specialties: General Dentistry and Oral Maxillofacial Surgery.
 - The Air Force Reserve was consistently below its authorizations in General Dentistry.
 - The Air National Guard consistently met its authorizations in its dental specialties.



Preliminary Observations

Objective 4: End Strength (continued)

- Nurses:
 - The active Army was consistently below its authorizations in 4 nursing specialties, including: Critical Care Nurse, Operating Room Nurse, and Nurse Anesthetist.
 - The active Navy was consistently below its authorizations in 4 nursing specialties, including: Critical Care Nurse and Operating Room Nurse.
 - The active Air Force was consistently below its authorizations in 2 nursing specialties: Flight Nurse and Neonatal Intensive Care Unit Nurse.
 - The Army Reserve was consistently below its authorizations in the Family Nurse Practitioner specialty.
 - The Army National Guard was consistently below its authorizations in the Medical/Surgical Nurse specialty.
 - The Navy Reserve was consistently below its authorizations in 5 nursing specialties, including: Operating Room Nurse and Mental Health Nurse.
 - The Air Force Reserve was consistently below its authorizations in 3 nursing specialties, including: Flight Nurse and Mental Health Nurse.
 - The Air National Guard was consistently below its authorizations in the Flight Nurse specialty.



Preliminary Observations

Objective 4: End Strength (continued)

- Other Medical Officers:
 - The active Army was consistently below its authorizations in 5 other medical officer specialties, including: Psychology, Physician Assistant, and Pharmacy.
 - The active Navy was consistently below its authorizations in 3 other medical officer specialties, including: Psychology and Environmental Health.
 - The active Air Force was consistently below its authorizations in 8 other medical officer specialties, including: Psychology, Social Worker, and Environmental Health.
 - The Army Reserve was consistently below its authorizations in 4 other medical officer specialties: Entomology, Optometry, Psychology, and Veterinary.
 - The Army National Guard was consistently below its authorizations in 5 other medical officer specialties, including: Psychology, Nuclear Medical Science, and Optometry.
 - The Navy Reserve was consistently below its authorizations in the Health Services Administration specialty.
 - The Air Force Reserve was consistently below its authorizations in Environmental Health.
 - The Air National Guard was consistently below its authorizations in 3 other medical officer specialties: Environmental Health, Optometry, and Pharmacy.
- Appendix V provides a complete listing of all medical specialties consistently below their authorizations for fiscal years 2005 through 2007 for each component.



Preliminary Observations

Objective 5: Challenges and Plans

- DOD and service officials stated that it is difficult to access and retain medical officers for a variety of reasons, including
 - the limited supply of, and high demand for, qualified professionals;
 - the lower pay generally offered by the military than by the private sector;
 - the stresses of deployment, and length and frequency of deployments;
 - solo practitioners are generally reluctant to sell their practices to enter the military;
 - length of time they are required to commit to staying in the service; and
 - medical schools accepting larger numbers of foreign students who are often prohibited from serving in the U.S. armed services.



Preliminary Observations

Objective 5: Challenges and Plans (continued)

- To address these challenges, the military services have a variety of plans, including pay incentives such as accession bonuses, scholarship programs, special pays, loan repayment programs, and retention bonuses. Examples of specific plans include the following:
 - To address the challenge of recruiting nurses, Navy Recruiting Command officials stated that they have dedicated 22 nurses to recruit medical personnel and offered up to a \$30,000 accession bonus. The accession bonuses helped the active Navy meet its recruiting goals in fiscal years 2007 and 2008.
 - In September 2008, the Army Office of the Surgeon General directed the Army Recruiting Command to implement the Officer Accession Pilot Program for the active Army and Army Reserve. The program allows fully qualified medical professionals between the ages of 43 and 60 to join the Army with a 2-year initial service obligation.¹¹
 - In November 2008, the Secretary of Defense approved a pilot program that allows for the recruitment of legal, nonimmigrant aliens on a case-by-case basis, to fill over 300 medical specialties that have a critical shortfall. The pilot program remains in effect through December 2009.
- DOD noted in comments to a draft of this briefing that the Assistant Secretary of Defense for Health Affairs biennially publishes a list of critical officer skills that governs eligibility for all reserve component incentive programs. In the past, these programs were restricted to skills filled below 80 percent. However, the services have requested authorization to maintain incentives for skills filled above 80 percent but still require the incentives to maintain appropriate personnel levels.

¹¹In September 2008, GAO reported that this pilot program states anticipated outcomes in terms of numbers of officer accessions and assigns responsibility to other organizations for assessing the program's options. However, the plan developed for the Officer Accession Pilot Program does not include a methodology to be used to evaluate its effectiveness. See GAO, *Military Personnel: Evaluation Methods Linked to Anticipated Outcomes Needed to Inform Decisions on Army Recruitment Incentives*, GAO-08-1037R (Washington, D.C.: Sept. 18, 2008).



Agency Comments and Our Evaluation

- We provided our draft briefing to DOD for comment, and the department generally concurred with the facts presented (see enc. II).
 - One of the technical comments we received dealt with how DOD addresses critical medical personnel shortages for the reserve components. In response to this comment, we added information about how the services have plans to maintain appropriate personnel levels in critical skills by using incentives.
 - In another technical comment, DOD suggested we use a different source to identify authorized levels of Army physicians and dentists for fiscal years 2001 and 2002. To address DOD's comment, we specifically identified the DOD source for the data. We changed the reported authorized levels where appropriate and where we did not make the change, we noted our reason.
- DOD also provided other technical comments, which we incorporated as appropriate.



GAO Contact and Acknowledgements

- Should you or your staff have any questions on the matters discussed in this briefing, please contact Brenda S. Farrell at (202) 512-3604 or farrellb@gao.gov.
- Key contributors to this report were Deborah Yarborough, Assistant Director; Rebecca S. Beale; Chaneé Gaskin; Cynthia Grant; Nicole Harms; Randy Neice; Stephanie Santoso; and Cheryl Weissman.

Appendix I: Scope and Methodology

- To determine how the Department of Defense (DOD) is organized to recruit medical students and access medical officers across the military services, we
 - obtained and reviewed DOD documents on policies and instructions from the active and reserve component organizations to understand the organizational structures, the responsibilities within the services' recruiting organizations, and the level of personnel resources dedicated to medical officers;
 - interviewed service officials who performed recruiting activities for the Army Recruiting Command, the Navy Recruiting Command, the Air Force Recruiting Service, the Air Force Reserve Recruiting Service, the Army National Guard, and the Air National Guard to discuss their roles and responsibilities and the overall organizational structure; and
 - interviewed senior civilian and military officials at the Office of the Assistant Secretary of Defense for Health Affairs to gain their perspectives on how the services recruit medical students and access medical officers.



Appendix I: Scope and Methodology (continued)

- To determine the extent to which the active and reserve components met their annual accession goals for medical officers in fiscal years 2001 through 2008, we
 - obtained scholarship award and accession data, as available, from the services, and we compared the data with the services' goals. Specifically, we examined scholarship award goals for the Armed Forces Health Professions Scholarship Program to identify how the services recruited medical students as they complete their graduate medical education;
 - reviewed data for direct accessions, which measured the ability of the services to access fully qualified medical officers;
 - calculated the percentage of scholarship award goals attained for the Armed Forces Health Professions Scholarship Program and the percentage of fully qualified medical officer accessions that were met for each year by four medical categories: "physicians" for the Medical Corps, "dentists" for the Dental Corps, "nurses" for the Nurse Corps, and "other medical officers" to refer to the Medical Service Corps, Medical Specialist Corps, Biomedical Science Corps, Veterinary Corps, and Warrant Officers; and
 - assessed the reliability of the services' data by reviewing relevant documentation related to the service-specific databases and interviewing the appropriate service officials who maintain the data.



Appendix I: Scope and Methodology (continued)

- To determine the extent to which the active and reserve¹ components retained medical officers in fiscal years 2001 through 2008, we
 - reviewed data in Health Manpower Statistics reports, which contained information about the numbers of medical officers who joined or left the services and are published by the Defense Manpower Data Center, and found that the data were sufficiently reliable for the purposes of this report,
 - calculated retention rates for the active and reserve components since we used the departmentwide data instead of service-specific data to facilitate an across-the-service analysis of retention rates. Therefore, we did not calculate attrition rates for the reserve components even though the reserve components commonly use attrition rates to manage their manpower and report the numbers of servicemembers who left the military services, and
 - To calculate the percentage of medical officers retained by each category, we
 - subtracted the number of officers who left the services for a given fiscal year from the beginning strength² for that fiscal year
 - divided the difference from our calculation by the beginning strength for that fiscal year. By using this departmentwide data, we did not have service-specific retention levels at which medical officer occupational specialties are considered critically short. Therefore, we could not determine whether any of the rates indicated that shortages in particular specialties were considered critical.

¹We analyzed retention data for the selected reserve since data were only available for those personnel.

²Beginning strength is defined as the number of medical officers on board on October 1 of a given fiscal year.



Appendix I: Scope and Methodology (continued)

- interviewed an Assistant Secretary of Defense for Health Affairs senior official who confirmed that our use of the Health Manpower Statistics report is appropriate because it provides consistent information about medical personnel.
- Our review did not address how medical officers were affected by stop loss authority, if at all. Stop loss authority is provided by 10 U.S.C. §12305. It authorizes the President to suspend any provision of law relating to the promotion, retirement, or separation of any member of the armed forces when members of a reserve component are called to active duty and the President determines the forces are essential to the national security of the United States.



Appendix I: Scope and Methodology (continued)

- To determine the extent to which the active and reserve⁴ components met their annual authorizations for medical officers in fiscal years 2001 through 2008, we did the following:
 - We interviewed officials from the Defense Manpower Data Center and from the Office of the Assistant Secretary of Defense for Health Affairs to determine what data source would be most appropriate to answer our objective. Based on these meetings, we determined that the *Health Manpower Statistics* report,⁵ which is published by the Defense Manpower Data Center using information compiled by the Health Manpower Personnel Data System, offered the most consistent and complete data.⁶ The Health Manpower Personnel Data System reports authorizations⁷ and end strengths⁸ for military medical officers at the corps level and the specialty level, such as cardiac surgeons, orthodontists, flight nurses, and psychologists.
 - Using Health Manpower Personnel Data System data from fiscal years 2001 through 2007, we compared the authorizations with the end strengths to determine the extent to which each of the four categories was above or below its authorized levels. In our analysis, if a component had one officer more than its authorization, we considered the category to be above its authorized level. Similarly, if a component had one officer fewer than its authorization, we considered the category to be below its authorized level.

⁴We analyzed authorization and end strength data for the selected reserve since data were only available for those personnel.

⁵Defense Manpower Data Center, *Health Manpower Statistics* (Seaside, Calif.: fiscal year 2001 – fiscal year 2007).

⁶Our analysis of the *Health Manpower Statistics* reports include tables A7 and R7A for physicians, tables A9 and R9 for dentists, and tables A10 and R10A for nurses and other medical officers.

⁷Congress authorizes annually the number of personnel that each service may have at the end of a given fiscal year. This number is known as authorized end strength. Based upon the statutory authorizations, DOD and the services establish annual year-end authorized personnel levels for the various medical occupations, which are categorized into various corps.

⁸End strength represents the actual numbers of medical personnel on board at the end of a fiscal year.



Appendix I: Scope and Methodology (continued)

- We compared specialty authorizations with specialty-level end strengths to identify those specialties that were consistently below their authorized levels. We considered an occupational specialty to be below authorizations if a component had one officer fewer than its authorization. If an occupational specialty was below its authorizations in each fiscal year between 2005 and 2007, we considered the occupational specialty to be consistently below its authorized level. Since the Health Manpower Personnel Data System data for the occupational specialty end strengths do not indicate whether the medical officers were employed in that specialty on a full-time basis, we contacted the Office of the Assistant Secretary of Defense for Health Affairs and appropriate service officials to verify our analysis of the specialties that were consistently below their authorizations.
- We assessed the reliability of the data by reviewing relevant documentation related to the Defense Manpower Data Center database and interviewing the appropriate service officials who maintain the data. We found the data for fiscal years 2001 through 2008 to be sufficiently reliable for the purposes of this report.



Appendix I: Scope and Methodology (continued)

- To determine the challenges the military services faced in accessing and retaining medical officers and the plans they developed to address those challenges, we
 - obtained and reviewed relevant DOD and service policies and instructions, DOD reports, and studies from the appropriate DOD and service officials;
 - reviewed relevant GAO reports related to accession and retention; and
 - interviewed civilian and military officials at the Office of the Assistant Secretary of Defense for Health Affairs; the Office of Program Analysis and Evaluation; the National Guard Bureau; the recruiting organizations for the Army, the Navy, the Air Force, the Army National Guard, the Air National Guard, the Air Force Reserve; and the Offices of the Surgeons General for the Army, the Navy, and the Air Force to obtain their perspectives about the accession and retention challenges and plans to address these challenges.



Appendix I: Scope and Methodology (continued)

- We conducted this performance audit from July 2008 through March 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Accessions—Physicians

Table 1: Armed Forces Health Professions Scholarship Goals Met by the Services for Active Duty Physicians, Fiscal Years 2001 through 2008

Fiscal year	Army				Navy				Air Force ^a			
	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met
2001	270	271	100.4	0.4	300	300	100.0	0.0	—	—	—	—
2002	318	326	102.5	2.5	362	346	95.6	-4.4	—	—	—	—
2003	284	319	112.3	12.3	290	289	99.7	-0.3	—	—	—	—
2004	292	294	100.7	0.7	265	232	87.5	-12.5	211	213	100.9	0.9
2005	307	237	77.2	-22.8	291	162	55.7	-44.3	191	220	115.2	15.2
2006	295	223	75.6	-24.4	300	199	66.3	-33.7	191	197	103.1	3.1
2007	295	235	79.7	-20.3	290	181	62.4	-37.6	223	211	94.6	-5.4
2008	360	357	99.2	-0.8	225	225	100.0	0.00	261	262	100.4	0.4

Source: GAO analysis of service data.

Notes: The services set their goals for awarding the Armed Forces Health Professions Scholarship Program based on their needs for fully trained medical professionals in the future.

^aDue to a system change, the active Air Force was unable to provide data for fiscal years 2001 through 2003.

Appendix II: Accessions—Physicians (continued)

Table 2: Direct Accession Goals Met by the Services for Active Duty Physicians, Fiscal Years 2001 through 2008

Fiscal year	Army				Navy				Air Force ^a			
	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met
2001	40	30	75.0	-25.0	20	18	90.0	-10.0	—	—	—	—
2002	45	47	104.4	4.4	15	16	106.7	6.7	—	—	—	—
2003	45	47	104.4	4.4	12	9	75.0	-25.0	—	—	—	—
2004	40	40	100.0	0.0	15	10	66.7	-33.3	280	41	14.6	-85.4
2005	40	36	90.0	-10.0	14	14	100.0	0.0	204	29	14.2	-85.8
2006	40	27	67.5	-32.5	15	10	66.7	-33.3	341	32	9.4	-90.6
2007	40	25	62.5	-37.5	9	9	100.0	0.0	358	36	10.1	-89.9
2008	60	20	33.3	-66.7	15	12	80.0	-20.0	154	14	9.1	-90.9

Source: GAO analysis of service data.

^aDue to a system change, the active Air Force was unable to provide data for fiscal years 2001 through 2003.

Appendix II: Accessions—Physicians (continued)

Table 3: Direct Accession Goals Met for Reserve Component Physicians, Fiscal Years 2001 through 2008

Fiscal year	Army Reserve			Army National Guard ^a			Navy Reserve			Air Force Reserve ^b			Air National Guard ^c		
	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met
2001	404	281	69.6	—	24	—	135	123	91.1	—	131	—	—	30	—
2002	395	366	92.7	—	30	—	145	119	82.1	—	108	—	—	41	—
2003	215	139	64.7	—	34	—	153	145	94.8	—	113	—	—	39	—
2004	204	97	47.5	—	23	—	124	72	58.1	—	101	—	—	35	—
2005	201	89	44.3	—	22	—	81	49	60.5	—	102	—	—	33	—
2006	201	76	37.8	—	17	—	100	20	20.0	—	88	—	—	28	—
2007	216	66	30.6	—	32	—	107	51	47.7	—	84	—	—	42	—
2008	157	69	43.9	117	40	34.2	73	107	146.6	—	67	—	—	38	—

Source: GAO analysis of service data.

^aIn fiscal years 2001 through 2007, the Army National Guard did not have accession goals.

^bAccording to an Air Force Reserve official, the Air Force Reserve did not have accession goals by corps.

^cAccording to an Air National Guard official, the Air National Guard did not have accession goals.

Appendix II: Accessions—Dentists

Table 4: Armed Forces Health Professions Scholarship Goals Met by the Services for Active Duty Dentists, Fiscal Years 2001 through 2008

Fiscal year	Army				Navy				Air Force ^a			
	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met
2001	87	88	101.1	1.1	62	62	100.0	0.0	–	–	–	–
2002	93	94	101.1	1.1	70	70	100.0	0.0	–	–	–	–
2003	97	99	102.1	2.1	80	80	100.0	0.0	–	–	–	–
2004	118	119	100.8	0.8	98	97	99.0	-1.0	66	69	104.5	4.5
2005	93	83	89.2	-10.8	85	69	81.2	-18.8	105	107	101.9	1.9
2006	115	79	68.7	-31.3	75	57	76.0	-24.0	135	139	103.0	3.0
2007	122	71	58.2	-41.8	75	65	86.7	-13.3	90	114	126.7	26.7
2008	135	112	83.0	-17.0	75	75	100.0	0.0	111	117	105.4	5.4

Source: GAO analysis of service data.

Notes: The services set their goals for awarding the Armed Forces Health Professions Scholarship Program based on their needs for fully trained medical professionals in the future.

^aDue to a system change, the active Air Force was unable to provide data for fiscal years 2001 through 2003.

Appendix II: Accessions—Dentists (Continued)

Table 5: Direct Accession Goals Met by the Services for Active Duty Dentists, Fiscal Years 2001 through 2008

Fiscal year	Army				Navy				Air Force ^a			
	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met
2001	20	15	75.0	-25.0	13	13	100.0	0.0	—	—	—	—
2002	20	11	55.0	-45.0	20	17	85.0	-15.0	—	—	—	—
2003	25	16	64.0	-36.0	31	13	41.9	-58.1	—	—	—	—
2004	30	9	30.0	-70.0	25	10	40.0	-60.0	87	32	36.8	-63.2
2005	30	16	53.3	-46.7	15	9	60.0	-40.0	104	23	22.1	-77.9
2006	30	7	23.3	-76.7	15	5	33.3	-66.7	116	28	24.1	-75.9
2007	30	10	33.3	-66.7	6	6	100.0	0.0	145	45	31.0	-69.0
2008	30	22	73.3	-26.7	16	15	93.8	-6.2	76	28	36.8	-63.2

Source: GAO analysis of service data.

^aDue to a system change, the active Air Force was unable to provide data for fiscal years 2001 through 2003.

Appendix II: Accessions—Dentists (continued)

Table 6: Direct Accession Goals Met for Reserve Component Dentists, Fiscal Years 2001 through 2008

Fiscal year	Army Reserve			Army National Guard ^a			Navy Reserve			Air Force Reserve ^b			Air National Guard ^c		
	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met
2001	118	120	101.7	—	11	—	50	65	130.0	—	19	—	—	21	—
2002	118	97	82.2	—	13	—	38	38	100.0	—	11	—	—	19	—
2003	45	33	73.3	—	8	—	33	35	106.1	—	21	—	—	9	—
2004	45	19	42.2	—	11	—	31	21	67.7	—	30	—	—	4	—
2005	48	13	27.1	—	2	—	18	7	38.9	—	14	—	—	15	—
2006	48	15	31.3	—	4	—	26	3	11.5	—	31	—	—	7	—
2007	46	9	19.6	—	15	—	35	13	37.1	—	23	—	—	6	—
2008	36	18	50.0	73	22	30.1	17	30	176.5	—	17	—	—	13	—

Source: GAO analysis of service data.

^aIn fiscal years 2001 through 2007, the Army National Guard did not have accession goals.

^bAccording to an Air Force Reserve official, the Air Force Reserve did not have accession goals by corps.

^cAccording to an Air National Guard official, the Air National Guard did not have accession goals.

Appendix II: Accessions—Nurses

Table 7: Direct Accession Goals Met by the Services for Active Duty Nurses, Fiscal Years 2001 through 2008

Fiscal year	Army				Navy				Air Force ^a			
	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met
2001	160	113	70.6	-29.4	100	99	99.0	-1.0	–	–	–	–
2002	210	165	78.6	-21.4	90	90	100.0	0.0	–	–	–	–
2003	210	161	76.7	-23.3	72	72	100.0	0.0	–	–	–	–
2004	200	152	76.0	-24.0	91	59	64.8	-35.2	394	244	61.9	-38.1
2005	170	128	75.3	-24.7	99	55	55.6	-44.4	350	200	57.1	-42.9
2006	220	176	80.0	-20.0	102	85	83.3	-16.7	350	316	90.3	-9.7
2007	210	177	84.3	-15.7	71	73	102.8	2.8	350	249	71.1	-28.9
2008	200	296	148.0	48.0	57	85	149.1	49.1	325	226	69.5	-30.5

Source: GAO analysis of service data.

^aDue to a system change, the active Air Force was unable to provide data for fiscal years 2001 through 2003.

Appendix II: Accessions—Nurses (continued)

Table 8: Direct Accession Goals Met for Reserve Component Nurses, Fiscal Years 2001 through 2008

Fiscal year	Army Reserve			Army National Guard ^a			Navy Reserve			Air Force Reserve ^b			Air National Guard ^c		
	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met
2001	570	582	102.1	—	23	—	247	216	87.4	—	231	—	—	43	—
2002	620	702	113.2	—	41	—	247	217	87.9	—	173	—	—	55	—
2003	507	494	97.4	—	38	—	261	237	90.8	—	211	—	—	67	—
2004	507	366	72.2	—	36	—	190	190	100.0	—	194	—	—	71	—
2005	485	322	66.4	—	29	—	69	67	97.1	—	156	—	—	78	—
2006	494	394	79.8	—	38	—	60	12	20.0	—	137	—	—	97	—
2007	440	372	84.5	—	96	—	23	8	34.8	—	139	—	—	96	—
2008	362	528	145.9	31	89	287.1	83	89	107.2	—	164	—	—	93	—

Source: GAO analysis of service data.

^aIn fiscal years 2001 through 2007, the Army National Guard did not have accession goals.

^bAccording to an Air Force Reserve official, the Air Force Reserve did not have accession goals by corps.

^cAccording to an Air National Guard official, the Air National Guard did not have accession goals.

Appendix II: Accessions—Other Medical Officers

Table 9: Armed Forces Health Professions Scholarship Goals Met by the Services for Active Duty Other Medical Officers, Fiscal Years 2001 through 2008

Fiscal year	Army				Navy				Air Force ^a			
	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met
2001	21	23	109.5	9.5	7	7	100.0	0.0	–	–	–	–
2002	42	42	100.0	0.0	13	13	100.0	0.0	–	–	–	–
2003	65	66	101.5	1.5	6	6	100.0	0.0	–	–	–	–
2004	38	54	142.1	42.1	6	6	100.0	0.0	25	23	92.0	-8.0
2005	57	55	96.5	-3.5	10	10	100.0	0.0	23	23	100.0	0.0
2006	67	68	101.5	1.5	9	9	100.0	0.0	45	31	68.9	-31.1
2007	85	89	104.7	4.7	19	19	100.0	0.0	19	18	94.7	-5.3
2008	78	93	119.2	19.2	20	20	100.0	0.0	55	45	81.8	-18.2

Source: GAO analysis of service data.

Notes: The services set their goals for awarding the Armed Forces Health Professions Scholarship Program based on their needs for fully trained medical professionals in the future.

^aDue to a system change, the active Air Force was unable to provide data for fiscal years 2001 through 2003.



Appendix II: Accessions—Other Medical Officers (continued)

Table 10: Direct Accession Goals Met by the Services for Active Duty Other Medical Officers, Fiscal Years 2001 through 2008

Fiscal year	Army				Navy				Air Force ^a			
	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met	Goal	Achieved	Percentage of goal met	Percentage of goal exceeded or not met
2001	120	118	98.3	-1.7	177	130	73.4	-26.6	–	–	–	–
2002	142	163	114.8	14.8	122	108	88.5	-11.5	–	–	–	–
2003	108	120	111.1	11.1	80	80	100.0	0.0	–	–	–	–
2004	90	132	146.7	46.7	101	94	93.1	-6.9	123	113	91.9	-8.1
2005	105	117	111.4	11.4	70	49	70.0	-30.0	116	105	90.5	-9.5
2006	149	212	142.3	42.3	80	54	67.5	-32.5	182	183	100.5	0.5
2007	162	244	150.6	50.6	60	60	100.0	0.0	215	157	73.0	-27.0
2008	199	227	114.1	14.1	106	108	101.9	1.9	356	164	46.1	-53.9

Source: GAO analysis of service data.

^aDue to a system change, the active Air Force was unable to provide data for fiscal years 2001 through 2003.



Appendix II: Accessions—Other Medical Officers (continued)

Table 11: Direct Accession Goals Met for Reserve Component Other Medical Officers, Fiscal Years 2001 through 2008

Fiscal year	Army Reserve			Army National Guard ^a			Navy Reserve			Air Force Reserve ^b			Air National Guard ^c		
	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met	Goal	Achieved	Percentage of goal met
2001	295	426	144.4	—	93	—	33	28	84.8	—	127	—	—	66	—
2002	307	360	117.3	—	117	—	26	30	115.4	—	115	—	—	94	—
2003	217	221	101.8	—	96	—	40	80	200.0	—	90	—	—	80	—
2004	151	136	90.1	—	86	—	20	20	100.0	—	86	—	—	67	—
2005	188	170	90.4	—	73	—	20	12	60.0	—	84	—	—	62	—
2006	197	208	105.6	—	91	—	21	7	33.3	—	82	—	—	102	—
2007	122	69	56.6	—	333	—	70	61	87.1	—	74	—	—	72	—
2008	222	236	106.3	288	362	125.7	19	33	173.7	—	59	—	—	99	—

Source: GAO analysis of service data.

^aIn fiscal years 2001 through 2007, the Army National Guard did not have accession goals.

^bAccording to an Air Force Reserve official, the Air Force Reserve did not have accession goals by corps.

^cAccording to an Air National Guard official, the Air National Guard did not have accession goals.



Appendix III: Retention—Physicians

Table 12: Percentage of Active and Reserve^a Components' Physicians Retained in Fiscal Years 2001 through 2008

Fiscal year	Army	Navy	Air Force	Army Reserve	Army National Guard	Navy Reserve	Air Force Reserve	Air National Guard
2001	89.8	91.9	86.5	85.4	81.8	85.2	89.4	89.7
2002	89.9	91.1	87.1	82.9	87.5	84.2	88.5	91.4
2003	92.0	90.8	86.5	86.7	85.5	81.2	78.8	86.6
2004	91.1	88.9	88.5	87.5	87.5	_ ^b	_ ^b	_ ^b
2005	90.5	89.9	88.4	88.4	85.3	76.9	82.7	92.5
2006	90.5	89.5	88.1	90.8	87.8	78.2	86.3	90.8
2007	91.7	89.1	88.4	89.8	81.1	81.0	87.5	89.5

Source: GAO analysis of DOD data.

Note: Fiscal year 2008 data were not available at the time of our review.

^aWe analyzed retention data for the selected reserve since data were only available for those personnel.

^bAccording to service officials, in fiscal year 2004, the Navy Reserve, the Air Force Reserve, and the Air National Guard retention data contained errors; these data were not included in our analysis.

Appendix III: Retention—Dentists

Table 13: Percentage of Active and Reserve^a Components' Dentists Retained in Fiscal Years 2001 through 2008

Fiscal year	Army	Navy	Air Force	Army Reserve	Army National Guard	Navy Reserve	Air Force Reserve	Air National Guard
2001	90.9	90.2	86.6	87.5	86.3	90.0	87.4	89.5
2002	88.1	87.6	90.0	84.7	84.7	85.4	90.6	94.1
2003	88.8	88.3	81.5	84.8	88.9	80.2	77.5	82.7
2004	85.4	89.5	88.4	86.1	88.0	_b	_b	_b
2005	87.5	87.0	84.3	87.7	85.5	80.0	87.7	86.2
2006	87.7	85.6	82.4	92.3	90.9	85.2	90.0	92.0
2007	88.8	85.3	85.9	84.8	85.8	86.3	85.7	86.3

Source: GAO analysis of DOD data.

Note: Fiscal year 2008 data were not available at the time of our review.

^aWe analyzed retention data for the selected reserve since data were only available for those personnel.

^bAccording to service officials, in fiscal year 2004, the Navy Reserve, the Air Force Reserve, and the Air National Guard retention data contained errors; these data were not included in our analysis.

Appendix III: Retention—Nurses

Table 14: Percentage of Active and Reserve^a Components' Nurses Retained in Fiscal Years 2001 through 2008

Fiscal year	Army	Navy	Air Force	Army Reserve	Army National Guard	Navy Reserve	Air Force Reserve	Air National Guard
2001	90.2	92.0	87.3	85.5	86.1	88.2	89.6	90.8
2002	88.6	92.4	93.6	84.5	85.8	88.5	93.5	93.8
2003	90.5	91.6	90.6	87.0	88.2	89.1	85.5	85.2
2004	88.3	90.5	91.1	87.5	84.6	_b	_b	_b
2005	88.6	90.4	88.7	86.8	87.2	83.6	87.2	91.3
2006	88.1	88.5	88.1	90.3	90.3	79.7	88.2	90.9
2007	90.0	90.0	87.9	87.7	88.2	87.3	87.5	93.3

Source: GAO analysis of DOD data.

Note: Fiscal year 2008 data were not available at the time of our review.

^aWe analyzed retention data for the selected reserve since data were only available for those personnel.

^bAccording to service officials, in fiscal year 2004, the Navy Reserve, the Air Force Reserve, and the Air National Guard retention data contained errors; these data were not included in our analysis.

Appendix III: Retention—Other Medical Officers

Table 15: Percentage of Active and Reserve^a Components' Other Medical Officers Retained in Fiscal Years 2001 through 2008

Fiscal year	Army	Navy	Air Force	Army Reserve	Army National Guard	Navy Reserve	Air Force Reserve	Air National Guard
2001	90.2	91.6	89.7	86.9	85.5	89.2	92.0	92.7
2002	90.8	93.2	94.5	87.3	83.3	84.5	94.1	91.2
2003	91.1	92.7	92.6	88.9	88.0	85.4	88.2	87.2
2004	91.5	91.2	90.5	85.5	82.2	— ^b	— ^b	— ^b
2005	90.0	89.8	89.1	88.2	89.0	87.5	87.6	89.8
2006	89.7	89.1	83.7	89.6	90.0	77.0	87.6	87.6
2007	91.0	90.6	89.4	88.4	85.5	88.7	88.3	90.8

Source: GAO analysis of DOD data.

Note: Fiscal year 2008 data were not available at the time of our review.

^aWe analyzed retention data for the selected reserve since data were only available for those personnel.

^bAccording to service officials, in fiscal year 2004, the Navy Reserve, the Air Force Reserve, and the Air National Guard retention data contained errors; these data were not included in our analysis.



Appendix IV: End Strength—Physicians

Table 16: Differences between Active Duty Physician Authorizations and End Strengths for Fiscal Years 2001 through 2008 by Service

Fiscal year	Army			Navy			Air Force		
	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized
2001	5,069 ^a	4,184	-17.5	3,937	4,096	4.0	3,469	3,691	6.4
2002	4,347	4,149	-4.6	3,945	4,104	4.0	3,487	3,695	6.0
2003	4,354	4,188	-3.8	3,957	4,064	2.7	3,481	3,569	2.5
2004	4,347	4,230	-2.7	3,960	3,952	-0.2	3,608	3,602	-0.2
2005	4,347	4,243	-2.4	3,811	3,845	0.9	3,468	3,544	2.2
2006	4,347	4,253	-2.2	3,920	3,811	-2.8	3,406	3,452	1.4
2007	4,347	4,274	-1.7	3,816	3,730	-2.3	3,365	3,429	1.9

Source: GAO analysis of DOD data.

Notes: The data are from GAO analysis of primary specialty tables (table A7) within the *Health Manpower Statistics* reports. GAO did not independently verify the validity of authorizations or end strength numbers. Authorizations are defined as the number of positions in which resources have been allocated to fulfill the services' medical mission. End strength numbers represent the number of medical personnel on board at the end of the fiscal year.

^aIn its comments on a draft of this briefing, DOD suggested the use of a different number (4,347) for fiscal year 2001 authorized levels for Army physicians. The fiscal year 2001 Health Manpower Statistics report contains two different numbers for authorized Army physicians, both the Army's suggested number as well as the number we reported. However, we did not revise the number as DOD suggested since the Army could not explain the rationale for this change.

Appendix IV: End Strength—Physicians (continued)

Table 17: Differences between Reserve^a Component Physician Authorizations and End Strengths for Fiscal Years 2001 through 2008

Fiscal year	Army Reserve			Army National Guard			Navy Reserve			Air Force Reserve			Air National Guard		
	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized
2001	1,734	1,770	2.1	950	584	-38.5	984	1,025	4.2	796	756	-5.0	467	440	-5.8
2002	1,658	1,906	15.0	847	628	-25.9	1,062	961	-9.5	801	784	-2.1	486	454	-6.6
2003	2,130	1,933	-9.2	808	625	-22.6	1,060	916	-13.6	809	716	-11.5	698	454	-35.0
2004	2,242	1,812	-19.2	806	618	-23.3	959	805	-16.1	817	662	-19.0	683	443	-35.1
2005	1,849	1,709	-7.6	804	564	-29.9	752	675	-10.2	725	636	-12.3	683	445	-34.8
2006	1,670	1,635	-2.1	841	576	-31.5	730	562	-23.0	782	609	-22.1	677	440	-35.0
2007	1,812	1,522	-16.0	791	490	-38.1	725	501	-30.9	771	590	-23.5	747	447	-40.2

Source: GAO analysis of DOD data.

Notes: The data are from GAO analysis of primary specialty tables (table R7A) within the *Health Manpower Statistics* reports. GAO did not independently verify the validity of authorizations or end strength numbers. Authorizations are defined as the number of positions in which resources have been allocated to fulfill the services' medical mission. End strength numbers represent the actual numbers of medical personnel on board at the end of a fiscal year.

^aWe analyzed authorization and end strength data for the selected reserve since data were only available for those personnel.

Appendix IV: End Strength—Dentists

Table 18: Differences between Active Duty Dentist Authorizations and End Strengths for Fiscal Years 2001 through 2008 by Service

Fiscal year	Army			Navy			Air Force		
	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized
2001	1,138	999	-12.2	1,373	1,343	-2.2	1,037	1,000	-3.6
2002	1,136	987	-13.1	1,370	1,294	-5.5	1,044	1,022	-2.1
2003	1,138	979	-14.0	1,361	1,248	-8.3	1,032	899	-12.9
2004	1,139	957	-16.0	1,359	1,205	-11.3	1,066	1,010	-5.3
2005	1,139	944	-17.1	1,246	1,130	-9.3	1,013	961	-5.1
2006	1,104	932	-15.6	1,210	1,058	-12.6	984	927	-5.8
2007	1,104	933	-15.5	1,167	1,008	-13.6	983	901	-8.3

Source: GAO analysis of DOD data.

Notes: The data are from GAO analysis of primary specialty tables (table A9) within the Health Manpower Statistics reports. GAO did not independently verify the validity of authorizations or end strength numbers. Authorizations are defined as the number of positions in which resources have been allocated to fulfill the services' medical mission. End strength numbers represent the actual numbers of medical personnel board at the end of a fiscal year.

Appendix IV: End Strength—Dentists (continued)

Table 19: Differences between Reserve^a Component Dentist Authorizations and End Strengths for Fiscal Years 2001 through 2008

Fiscal year	Army Reserve			Army National Guard			Navy Reserve			Air Force Reserve			Air National Guard		
	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized
2001	591	621	5.1	286	209	-26.9	281	377	34.2	191	192	0.5	185	169	-8.6
2002	590	672	13.9	285	216	-24.2	282	374	32.6	192	191	-0.5	187	179	-4.3
2003	656	635	-3.2	283	207	-26.9	282	334	18.4	212	166	-21.7	193	159	-17.6
2004	651	575	-11.7	284	200	-29.6	296	305	3.0	218	177	-18.8	196	147	-25.0
2005	639	518	-18.9	286	175	-38.8	273	256	-6.2	197	170	-13.7	196	137	-30.1
2006	586	495	-15.5	290	169	-41.7	256	240	-6.3	213	175	-17.8	197	131	-33.5
2007	671	429	-36.1	279	161	-42.3	257	218	-15.2	211	174	-17.5	134	118	-11.9

Source: GAO analysis of DOD data.

Notes: The data are from GAO analysis of primary specialty tables (table R9) within the *Health Manpower Statistics* reports. GAO did not independently verify the validity of authorizations or end strength numbers. Authorizations are defined as the number of positions in which resources have been allocated to fulfill the services' medical mission. End strength numbers represent the actual numbers of medical personnel on board at the end of a fiscal year.

^aWe analyzed authorization and end strength data for the selected reserve since data were only available for those personnel.

Appendix IV: End Strength—Nurses

Table 20: Differences between Active Duty Nurse Authorizations and End Strengths for Fiscal Years 2001 through 2008 by Service

Fiscal year	Army			Navy			Air Force		
	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized
2001	3,381	3,250	-3.9	3,177	3,145	-1.0	3,984	3,714	-6.8
2002	3,400	3,170	-6.8	3,179	3,157	-0.7	3,962	3,865	-2.4
2003	3,392	3,213	-5.3	3,176	3,110	-2.1	3,792	3,695	-2.6
2004	3,415	3,157	-7.6	3,176	3,038	-4.3	3,895	3,733	-4.2
2005	3,415	3,089	-9.5	3,095	2,934	-5.2	3,766	3,529	-6.3
2006	3,406	3,134	-8.0	3,092	2,829	-8.5	3,713	3,429	-7.6
2007	3,393	3,241	-4.5	3,063	2,803	-8.5	3,666	3,289	-10.3

Source: GAO analysis of DOD data.

Notes: The data are from GAO analysis of primary specialty tables (table A10) within the Health Manpower Statistics reports. GAO did not independently verify the validity of authorizations or end strength numbers. Authorizations are defined as the number of positions in which resources have been allocated to fulfill the services' medical mission. End strength numbers represent the actual numbers of medical personnel board at the end of a fiscal year.

Appendix IV: End Strength—Nurses (continued)

Table 21: Differences between Reserve^a Component Nurse Authorizations and End Strengths for Fiscal Years 2001 through 2008

Fiscal year	Army Reserve			Army National Guard			Navy Reserve			Air Force Reserve			Air National Guard		
	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized
2001	5,743	6,045	5.3	710	763	7.5	1,921	1,839	-4.3	2,319	2,291	-1.2	823	834	1.3
2002	5,608	5,918	5.5	727	738	1.5	1,936	1,838	-5.1	2,301	2,354	2.3	816	839	2.8
2003	6,097	5,837	-4.3	678	716	5.6	1,936	1,865	-3.7	2,224	2,218	-0.3	915	778	-15.0
2004	5,751	5,589	-2.8	675	673	-0.3	1,787	1,832	2.5	2,252	2,147	-4.7	918	785	-14.5
2005	5,191	5,253	1.2	675	637	-5.6	1,349	1,591	17.9	2,029	2,011	-0.9	918	789	-14.1
2006	4,494	5,101	13.5	679	646	-4.9	1,339	1,329	-0.7	1,981	1,880	-5.1	938	820	-12.6
2007	4,567	4,876	6.8	615	665	8.1	1,353	1,266	-6.4	1,967	1,771	-10.0	922	847	-8.1

Source: GAO analysis of DOD data.

Notes: The data are from GAO analysis of primary specialty tables (table R10A) within the *Health Manpower Statistics* reports. GAO did not independently verify the validity of authorizations or end strength numbers. Authorizations are defined as the number of positions in which resources have been allocated to fulfill the services' medical mission. End strength numbers represent the actual numbers of medical personnel on board at the end of a fiscal year.

^aWe analyzed authorization and end strength data for the selected reserve since data were only available for those personnel.

Appendix IV: End Strength—Other Medical Officers

Table 22: Differences between Active Duty Other Medical Officer Authorizations and End Strengths for Fiscal Years 2001 through 2008 by Service

Fiscal year	Army			Navy			Air Force		
	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized
2001	5,362	5,346	-0.3	2,729	2,655	-2.7	3,486	3,470	-0.5
2002	5,396	5,484	1.6	2,725	2,682	-1.6	3,480	3,742	7.5
2003	5,465	5,557	1.7	2,742	2,663	-2.9	3,681	3,857	4.8
2004	4,283	5,675	32.5	2,767	2,627	-5.1	3,724	3,904	4.8
2005	5,460	5,691	4.2	2,587	2,490	-3.7	3,506	3,772	7.6
2006	5,913	5,839	-1.3	2,563	2,363	-7.8	3,393	3,337	-1.7
2007	5,949	6,057	1.8	2,562	2,293	-10.5	3,406	3,204	-5.9

Source: GAO analysis of DOD data.

Notes: The data are from GAO analysis of primary specialty tables (table A10) within the *Health Manpower Statistics* reports. GAO did not independently verify the validity of authorizations or end strength numbers. Authorizations are defined as the number of positions in which resources have been allocated to fulfill the services' medical mission. End strength numbers represent the actual numbers of medical personnel board at the end of a fiscal year.

Appendix IV: End Strength—Other Medical Officers (continued)

Table 23: Differences between Reserve^a Component Other Medical Officer Authorizations and End Strengths for Fiscal Years 2001 through 2008

Fiscal year	Army Reserve			Army National Guard			Navy Reserve			Air Force Reserve			Air National Guard		
	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized	Authorized level	End strength	Percentage above/below authorized
2001	2,448	3,762	53.7	1,890	1,481	-21.6	455	646	42.0	988	1,076	8.9	733	696	-5.0
2002	2,517	4,068	61.6	1,886	1,870	-0.8	457	581	27.1	937	1,148	22.5	726	725	-0.1
2003	2,951	4,033	36.7	1,869	1,946	4.1	430	570	32.6	940	1,128	20.0	752	704	-6.4
2004	3,062	3,819	24.7	1,879	1,735	-7.7	447	538	20.4	955	1,103	15.5	773	688	-11.0
2005	2,876	3,632	26.3	1,936	1,783	-7.9	373	499	33.8	848	1,058	24.8	768	708	-7.8
2006	2,794	3,607	29.1	2,132	2,031	-4.7	346	399	15.3	952	990	4.0	747	725	-2.9
2007	3,196	3,460	8.3	2,198	2,160	-1.7	354	395	11.6	951	947	-0.4	849	746	-12.1

Source: GAO analysis of DOD data.

Notes: The data are from GAO analysis of primary specialty tables (table R10A) within the *Health Manpower Statistics* reports. GAO did not independently verify the validity of authorizations or end strength numbers. Authorizations are defined as the number of positions in which resources have been allocated to fulfill the services' medical mission. End strength numbers represent the actual numbers of medical personnel on board at the end of a fiscal year.

^aWe analyzed authorization and end strength data for the selected reserve since data were only available for those personnel.



Appendix V: End Strength—Physicians

Table 24: Active and Reserve^a Components Consistently below Authorized Physician Specialties for Fiscal Years 2005 through 2007

Occupational specialty title	Army	Navy	Air Force	Army Reserve	Army National Guard	Navy Reserve	Air Force Reserve	Air National Guard	Number of components with specialty consistently below authorizations
Allergy/immunology		X	X						2
Anesthesiology	X			X		X	X		4
Aviation/aerospace medicine			X		X	X	X	X	5
Cardiac/thoracic surgery		X		X					2
Cardiology/cardiovascular			X			X			2
Colon/rectal surgery						X			1
Family practice	X	X							2
Gastroenterology			X			X			2
General medicine		X			X	X			3
General surgery		X		X		X	X	X	5
Hematology/oncology			X						1
Infectious disease			X	X		X	X		4
Internal medicine								X	1
Nephrology						X			1
Neurological surgery	X		X						2
Obstetrics/gynecology						X			1
Ophthalmology				X					1
Orthopedic surgery				X		X	X	X	4
Pathology			X						1
Peripheral vascular surgery			X						1
Plastic surgery			X						1
Preventive and occupational medicine		X							1
Psychiatry	X					X			2
Pulmonary disease			X	X		X			3
Radiology	X	X							2
Rheumatology			X						1
Urology	X		X	X					3
Total number of specialties consistently below authorized level by service	6	7	13	8	2	13	5	4	

Source: GAO analysis of DOD data.

Notes: We consider an occupational specialty to be below its authorized level if the component had one person short of its authorization. If an occupational specialty was below authorization in each year for fiscal years 2005 through 2007, we considered the occupational specialty consistently below its authorizations.

^aWe analyzed authorization and end strength data for the selected reserve since data were only available for those personnel.

Appendix V: End Strength—Dentists

Table 25: Active and Reserve^a Components Consistently below Authorized Dentist Specialties for Fiscal Year 2005 through 2007

Occupational specialty title	Army	Navy	Air Force	Army Reserve	Army National Guard	Navy Reserve	Air Force Reserve	Air National Guard	Number of components with specialty consistently below authorizations
Comprehensive dentistry	X		X	X					3
General dentistry	X		X		X	X	X		5
Oral maxillofacial surgery				X		X			2
Oral pathology/diagnosis	X								1
Orthodontics	X								1
Pedodontics	X								1
Prosthodontics		X	X	X					3
Public health dentistry				X					1
Total number of specialties consistently below authorized level by service	5	1	3	4	1	2	1	0	

Source: GAO analysis of DOD data.

Notes: We consider an occupational specialty to be below its authorized level if the component had one person short of its authorization. If an occupational specialty was below authorization in each year for fiscal years 2005 through 2007, we considered the occupational specialty consistently below its authorizations.

^aWe analyzed authorization and end strength data for the selected reserve since data were only available for those personnel.



Appendix V: End Strength—Nurses

Table 26: Active and Reserve^a Components Consistently below Authorized Nurse Specialties for Fiscal Year 2005 through 2007

Occupational specialty title	Army	Navy	Air Force	Army Reserve	Army National Guard	Navy Reserve	Air Force Reserve	Air National Guard	Number of components with specialty consistently below authorizations
Critical care nurse	X	X							2
Family nurse practitioner				X					1
Flight nurse			X				X	X	3
General nursing		X							1
Medical/surgical nurse					X				1
Mental health nurse						X	X		2
Neonatal intensive care unit nurse			X			X			2
Nurse anesthetist	X					X	X		3
Nurse midwife						X			1
Obstetrics nurse	X								1
Operating room nurse	X	X				X			3
Pediatric nurse practitioner		X							1
Total number of specialties consistently below authorized level by service	4	4	2	1	1	5	3	1	

Source: GAO analysis of DOD data.

Notes: We consider an occupational specialty to be below its authorized level if the component had one person short of its authorization. If an occupational specialty was below authorization in each year for fiscal years 2005 through 2007, we considered the occupational specialty consistently below its authorizations.

^aWe analyzed authorization and end strength data for the selected reserve since data were only available for those personnel.



Appendix V: End Strength—Other Medical Officers

Table 27: Active and Reserve^a Components Consistently below Authorized Specialties for Other Medical Officers for Fiscal Year 2005 through 2007

Occupational specialty title	Army	Navy	Air Force	Army Reserve	Army National Guard	Navy Reserve	Air Force Reserve	Air National Guard	Number of components with specialty consistently below authorizations
Biochemistry			X						1
Bioenvironmental engineering			X						1
Entomology				X					1
Environmental health		X	X				X	X	4
Health services administration		X				X			2
Industrial hygiene			X						1
Microbiology			X						1
Nuclear medical science	X				X				2
Optometry				X	X			X	3
Pharmacy	X							X	2
Physical therapy					X				1
Physician assistant	X				X				2
Podiatry			X						1
Psychology	X	X	X	X	X				5
Social worker	X		X						2
Veterinarian				X					1
Total number of specialties consistently below authorized level by service	5	3	8	4	5	1	1	3	

Source: GAO analysis of DOD data.

Notes: We consider an occupational specialty to be below its authorized level if the component had one person short of its authorization. If an occupational specialty was below authorization in each year for fiscal years 2005 through 2007, we considered the occupational specialty consistently below its authorizations.

^aWe analyzed authorization and end strength data for the selected reserve since data were only available for those personnel.

Comments from the Department of Defense



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

APR 8 2009

Ms. Brenda S. Farrell
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G. Street, N.W.
Washington, DC 20548

Dear Ms. Farrell:

This is the Department of Defense (DoD) response to the Government Accountability Office (GAO) draft report, GAO-09-469R, "MILITARY HEALTH CARE: Status of Accession, Retention, and End Strength for Military Medical Officers and Preliminary Observations Regarding Accession and Retention Challenges," dated April 1, 2009 (GAO Code 351333).

Thank you for the opportunity to review and comment on the draft report. Overall, I concur with the report's findings and conclusions. Responses to the draft report are attached.

Again, thank you for the opportunity to provide these comments. My points of contact for additional information are Dr. Gary Matteson (Functional) at (703) 681-8890, gary.matteson@ha.osd.mil and Mr. Gunther Zimmerman (Audit Liaison) at (703) 681-4360, gunther.zimmerman@tma.osd.mil.

Sincerely,

for Gary W. Smith, MD, MMM
Jack W. Smith, MD, MMM
Acting Deputy Assistant Secretary of Defense
Clinical and Program Policy

Enclosures:
As stated

DOD's responses to the draft briefing were technical comments.

(351333)

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday afternoon, GAO posts on its Web site newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to www.gao.gov and select "E-mail Updates."

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's Web site, <http://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm

E-mail: fraudnet@gao.gov

Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Ralph Dawn, Managing Director, dawnr@gao.gov, (202) 512-4400
U.S. Government Accountability Office, 441 G Street NW, Room 7125
Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548